



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,529	05/09/2006	Samir F. Saba	UPITT-09379	7228
23535 7590 05/27/2010 MEDLEN & CARROLL, LLP 101 HOWARD STREET SUITE 350 SAN FRANCISCO, CA 94105				
			EXAMINER EVANSKO, GEORGE ROBERT	
			ART UNIT 3762	PAPER NUMBER
			MAIL DATE 05/27/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/535,529

Applicant(s)

SABA, SAMIR F.

Examiner

George R. Evanisko

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-10, 27-29, 31 and 33-44 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-29, 31 and 33-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 6-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/16/07.

Response to Amendment

The declaration under 37 CFR 1.132 filed 2/17/10 is insufficient to overcome the rejection of the claims based upon the Kupper reference as set forth in the last Office action because: the applicant's arguments do not correspond to the elements being claimed. Although the applicant's invention may determine the earliest arriving signal and then identify the origin of an arrhythmia, the claims only state that the identification is done by determining the earliest arriving signal. The claim does not go a step further and actually identify the origin from the determination. In addition, regarding the "blanking period", the claim only states the "electrodes" are configured to detect after the blanking period, not the timing device. Also, the blanking period is a relative amount of time and electrodes are just conductive pieces of material capable of detecting after a relative blanking period, for instances, of 10 seconds.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27-29, 31, and 33-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter which was not described in the original specification was a "timing device configured to identify the origin of an arrhythmia" by determining if said earliest arriving electrical signal...electrode, in combination with the other elements in the claim(s). The original specification on page 11, line 21 is the only place that "timing device" is mentioned and is only mentioned to detect the earliest arriving electrical signal, but is not mentioned to be "configured to identify the origin of an arrhythmia".

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-29, 31, 33, 34, 36-42 and 44 are rejected under 35 U.S.C. 102(c) as anticipated by Kupper (6813518). Kupper discloses a pacemaker/defibrillator to deliver simultaneous

pacing burst pulses to the atrium and ventricle when a tachycardia is detected (e.g. abstract, figures 6, 7, col. 11, line 53) using multiple leads/electrodes and thereafter senses for the first atrial or ventricular depolarization (e.g. col. 11, line 64, figure 3, element 74/58) to determine the first depolarization to provide different intervals (e.g. escape intervals, col. 10). Figure 5 shows a "timing" device as element 63 that is used to set the pacing escape intervals. These intervals are used to set pacing escape intervals (e.g. V-V, V-A, A-V, and A-A) for the different pacing modes and to determine arrhythmias and the device necessarily does determine the earliest arriving electrical signal and the location of origin (atrium or ventricle) since it sets the pacing intervals accordingly, since following therapy it waits to sense a ventricular or atrial event (e.g. cols 9-11), and/or since the claim only states it identifies the origin of an arrhythmia "by determining if said earliest arriving electrical signal was detected by said ...tip electrodes" which the timing device of Kupper does. In other words, if you determine the earliest arriving electrical signal, you have identified the origin of an arrhythmia since that is how the claim states the identification is done. NOTE, the claim does not state that the determination of the depolarization is used to classify an origin of an arrhythmia (i.e. "determining the earliest...signal; identifying the origin of an arrhythmia from said determination"—any new limitation will require support in the specification). In addition, the leads of Kupper necessarily have separate conductors since they are separate leads and deliver signals and sense from separate electrodes.

Claims 35 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupper. Kupper discloses the claimed invention except for the quadripolar sensing lead. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify

the IMD as taught by Kupper, with the quadripolar sensing lead since it was known in the art and the examiner is taking official notice that IMDs use quadripolar sensing leads to provide the predictable results of allowing multiple areas of the heart to be sensed with one lead by inserting a minimal number of leads and therefore providing less trauma/problems to the heart.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment. The argument that the applicant has made the election "with" traverse is not persuasive. Although the applicant may have said over the phone that the election is made "with" traverse, the applicant never provided arguments for the traversal. Since no timely arguments were filed, the election is taken as an election without traverse (see the office action of 5/22/08).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Evanisko whose telephone number is 571 272 4945. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571 272 4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George R Evanisko/
Primary Examiner, Art Unit 3762